



Atty. Dkt. No. 039153-0310 (F0797)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Calvin T. Gabriel et al.

Title: PROCESS FOR IMPROVING THE  
ETCH STABILITY OF ULTRA-  
THIN PHOTORESIST

Appl. No.: 09/819,552

Filing Date: 03/28/2001

Examiner: Unknown

Art Unit: 2812

**CERTIFICATE OF MAILING**  
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on the date below.

Deborah A. Kocorowski  
(Printed Name)

Deborah A. Kocorowski  
(Signature)

July 26, 2001  
(Date of Deposit)

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR §1.56**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Submitted herewith on Form PTO-1449 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56. A copy of each listed document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

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TC 2600 MAIL ROOM

**TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

**RELEVANCE OF EACH DOCUMENT**

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TC 1700

An English translation of the foreign-language document is enclosed to assist the PTO in its duty to consider the submitted foreign language document (37 CFR §1.98 and MPEP §609).

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 06-1447. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 06-1447.

Respectfully submitted,

Date 7/26/2001

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U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

039153-0310 (F0797)

SERIAL NO.

09/819,552

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

APPLICANT

Calvin T. Gabriel et al.

FILING DATE

03/28/2001

GROUP ART UNIT

2812

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
		09/819,342		Shields et al			03/28/01
		09/819,343		Gabriel et al			03/28/01
		09/819,344		Okoroanyanwu et al			03/28/01
		09/819,692		Okoroanyanwu et al			03/28/01
		09/820,143		Okoroanyanwu et al			03/28/01
		6,107,172	08/22/00	Yang et al	438	585	
		6,103,457	08/15/00	Gabriel	430	318	
		5,965,461	10/12/99	Yang et al	438	717	
		5,003,178	03/26/91	Livesay	250	492.300	

## FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
							YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		Livesay, W. R., "Large-area electron-beam source," Journal of Vacuum Science & Technology B, Vol. 11, No. 6, Nov./Dec. 1993, pp. 2304-2308, American Vacuum Society
		Yang, J. J. et al, "Electron Beam Processing for Spin-on Polymers and its Applications to Back-End-of-Line (BEOL) Integration," Materials Research Society Symposium Proceedings, Vol. 511, 1998, pp. 49-55, Materials Research Society
		Ross et al, "Plasma Etch Characteristics of Electron Beam Processed Photoresist," The Society of Photo-Optical Instrumentation Engineers, Vol. 2438, 1995, pp. 803-816, SPIE-The International Society for Optical Engineering
		Grün, Von A. E., "Lumineszenz-photometrische Messungen der Energieabsorption im Strahlungsfeld von Elektronenquellen Eindimensionaler Fall in Luft," Zeitschrift für Naturforschung, Vol. 12a, 1957, pp. 89-95, Publisher: Zeitschrift für Naturforschung; full English Translation attached (11 pgs.)

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include any copy of this form with next communication to applicant.